

# An Exploration of L1, L2, and Bilingual Students' Writing Features on the SAT Essay

Jennifer L. Kobrin and Emily J. Shaw

The College Board

Presented at the National Council on Measurement in Education

Vancouver, British Columbia, Canada

April 14, 2012



# Background

- Essays written by individuals from different language backgrounds often differ in their linguistic, stylistic, and rhetorical characteristics and these features may affect scores.
- Many studies have documented differences in the composing processes, features, and structure of compositions by L1 and L2 writers.

# Background, continued

- Research has shown that in general L2 students:
  - Write at a slower rate, and have shorter texts with more errors, compared to L1 texts.
  - Use a different argument structure than L1 writers, and they less often state and support their position fully.
  - Employ simple sentences with more personal references and repetitions of ideas and vocabulary.
  - Exhibit more use of the first person singular, or the pronoun “I”.

## Background, continued

Variation in task requirements and instructions significantly influences the characteristics of L2 essays. For example:

- Hinkel (2009): broad topics require L2 writers to rely on their own experience in lieu of factual evidence, leading to overuse of certain language features (obligation and necessity modals).
- Hirokawa & Swales (1986): L2 essays written to a simple topic were longer, contained more subordination, and exhibited greater use of the first-person than those written to an academic topic.

# Research Questions

- Do L1, L2, and bilingual SAT-takers differ in the frequency of use of particular essay features?
- Are there differences in the frequency of use of essay features for language groups within ethnic groups (e.g., Asian, Hispanic)?
- Is there variability in the use of essay features by language group across different essay prompts?

# Method

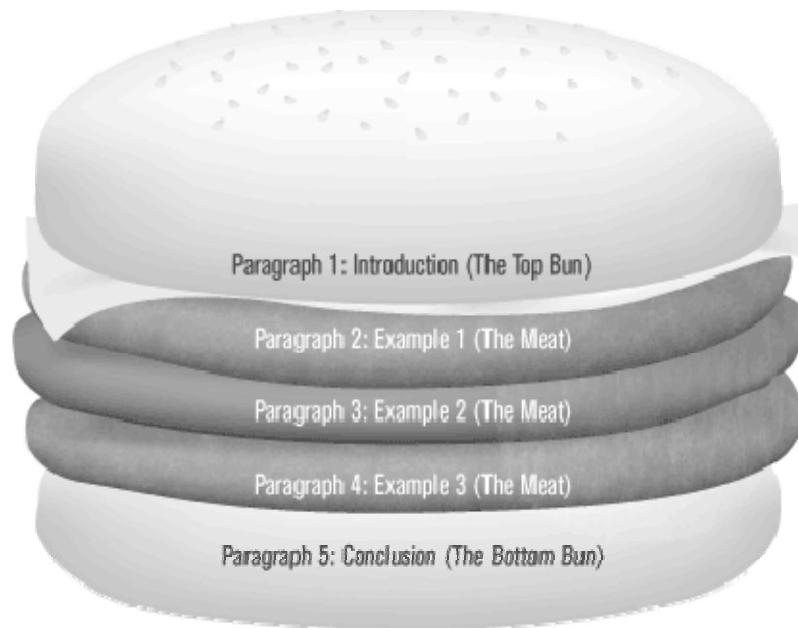
- Data source – The SAT essay, a 20-minute holistically-scored essay. Essays were written to 14 prompts administered between March 2005 and January 2006 ( $n=6,570$ ). Students' best language and ethnicity were taken from the SAT Questionnaire.
- Essays were coded for a variety of features, with reliability (percent agreement) ranging from .69 to .98.
- Analyses included descriptive statistics (frequencies of essay features by language within ethnic group), standardized differences (effect sizes), and logistic multilevel regression (HGLM).

# Coded Essay Features and Reliability

Essay Feature	% agreement	Type of Examples	% agreement
Number of words	.90*	Academic	88
Use of first-person	96	Politics/Professions	84
Concludes mid-sentence	95	Popular Culture/Sports	89
Five-paragraph theme	92	Personal experience	77
Quoted stimulus	69	Religious	98
Rhetorical approach	83	No example	98

\* Pearson correlation

# The Five-Paragraph Theme



Borrowed from [www.sparknotes.com](http://www.sparknotes.com)

# Results: Standardized Differences

Std. Diff.	Asian	Af. American	Hispanic	White
<b>L1 vs. L2</b>				
SAT Essay	0.78	0.31	0.71	0.38
SAT-W	0.83	0.36	0.85	0.47
N words	0.36	0.18	0.29	0.11
<b>L1 vs. BIL</b>				
SAT Essay	0.17	0.00	0.06	0.00
SAT-W	0.23	0.06	0.15	0.07
N words	-0.12	-0.08	0.02	-0.16

Standardized differences were computed by subtracting the means for L2 and BIL from the means for L1 and dividing by the total standard deviation for each ethnic group.

# Results: Variability in Frequency of Selected Essay Features Across Prompts

Essay Feature	L1	BIL	L2
First-person	.35 - .62	.33 - .78	.43 - .74
Concluded mid-sentence	.09 – .18	.10 - .24	.09 - .24
Five-paragraph theme	.04 - .14	.04 - .15	.01 - .14
Quoted stimulus	.10 - .45	.07 - .57	.05 - .45
Personal experience	.23 - .78	.18 - .76	.34 - .87
Academic example	.16 - .88	.18 - .94	.09 - .81
Rhetorical approach <sup>a</sup>			
Agreed	.05 - .92	.16 - .93	.03 - .90
Disagreed	.01 - .24	.01 - .22	.01 - .28
Agreed & disagreed	.05 - .94	.04 - .97	.04 - .90
No position	.00 - .08	.00 - .04 <sup>b</sup>	.00 - .13

<sup>a</sup>Rhetorical approach was coded for 10 of the 14 prompts. <sup>b</sup>There were only 12 BIL students taking no position across all prompts.

# Results: Variability in Frequency of Selected Essay Features Across Prompts

Essay Feature	L1	BIL	L2
First-person	.35 - .62	.33 - .78	.43 - .74
Concluded mid-sentence	.09 – .18	.10 - .24	.09 - .24
Five-paragraph theme	.04 - .14	.04 - .15	.01 - .14
Quoted stimulus	.10 - .45	.07 - .57	.05 - .45
Personal experience	.23 - .78	.18 - .76	.34 - .87
Academic example	.16 - .88	.18 - .94	.09 - .81
Rhetorical approach <sup>a</sup>			
Agreed	.05 - .92	.16 - .93	.03 - .90
Disagreed	.01 - .24	.01 - .22	.01 - .28
Agreed & disagreed	.05 - .94	.04 - .97	.04 - .90
No position	.00 - .08	.00 - .04 <sup>b</sup>	.00 - .13

<sup>a</sup>Rhetorical approach was coded for 10 of the 14 prompts. <sup>b</sup>There were only 12 BIL students taking no position across all prompts.

# “The Working Life” Prompt

It's easy to see why – aside from the income it provides – having a job is so desirable in our culture. Work works for us. It structures our time and imposes a rhythm on our lives. It gets us organized into various kinds of communities and social groups. And perhaps most important, work tells us what to do every day.

Adapted from Joanne B. Ciulla, “The Working Life”

**Assignment:** Do people depend on work – whether it is a job, schoolwork, or volunteer work – to determine what their daily activities and interactions with others should be? Plan and write an essay in which you develop your point of view on this issue. Support your position with reasoning and examples taken from your reading, studies, experience, or observations.

# Results: Multilevel Logistic Regression Odds Ratios

Essay Feature	Intercept	Writing MC	BIL	L2	Asian	Black	Hispanic
Concluded mid-sent.	<b>0.13</b>	0.99	0.95	1.06	<b>1.60</b>	<b>1.37</b>	<b>1.45</b>
First-person	1.04	<b>0.97</b>	1.06	<b>1.27</b>	1.01	<b>1.16</b>	0.85
Five-paragraph theme	<b>0.06</b>	<b>1.05</b>	1.62	0.59	<b>1.92</b>	1.04	0.72
Quoted stimulus	<b>0.39</b>	0.99	1.07	1.35	0.91	0.86	1.20
Personal experience	1.08	<b>0.99</b>	0.96	<b>1.23</b>	0.92	1.03	1.00
Academic example	0.87	<b>1.06</b>	1.20	1.12	<b>1.40</b>	0.95	0.90
Rhetorical approach							
Agreed	1.11	1.01	1.20	1.19	1.08	1.19	1.14
Disagreed	<b>0.12</b>	<b>0.99</b>	0.79	1.02	0.87	0.81	0.88
Agreed & Disagreed	0.35	1.01	1.01	<b>0.74</b>	0.98	0.90	0.89
No position	<b>0.01</b>	<b>0.94</b>	0.68	1.08	1.19	1.35	1.35
Interaction Effects	BIL x Asian	BIL x Black	BIL x Hisp.	L2 x Asian	L2 x Black	L2 x Hisp.	
Five-paragraph theme	0.51	1.25	0.90	1.97	2.73	<b>3.46</b>	
Quoted stimulus	1.04	1.43	0.87	<b>0.52</b>	<b>0.50</b>	<b>0.50</b>	

# Results: Multilevel Regression Variance Components for Final Models

Essay Feature	Intercept		Writing M-C		Asian	
Concluded mid-sentence	0.01 (0.10)		---	---	---	---
First-person	0.12 (0.34)	**	---	---	---	---
Five-paragraph theme	0.08 (0.28)	**	---	---	---	---
Quoted stimulus	0.34 (0.58)	**	< 0.01 (0.01)	*	---	---
Personal experience	0.66 (0.82)	**	---	---	---	---
Academic example	1.73 (1.32)	**	---	---	0.15 (0.39)	**
Rhetorical approach						
Agreed	2.52 (1.59)	**	< 0.01 (0.02)	**	---	---
Disagreed	0.89 (0.94)	**	---	---	---	---
Agreed & disagreed	2.66 (1.63)	**	---	---	---	---
No position	0.80 (0.90)	**	---	---	---	---

\*\*p< .01 \*p<.05. Dashes indicate that final model fixed slopes for these variables.



# Conclusions and Discussion

- This study adds to the literature finding that L2 students differ in the nature of their writing in response to essay tests.
- L2 students were more likely to use first-person and personal experience, and were less likely to take a mixed argument approach when responding to the SAT essay prompts.
- This study examined the use of each essay feature independently although we know that test-takers use a combination of many of these features.

# Conclusions and Discussion, continued

- There was substantial variability in the frequency of essay features by language group across the 14 prompts.
- Characteristics of the prompts to help explain this variability were not examined in this study, but will be important to explore in future research.
- Silva (1993) noted that the difference between L1 and L2 writers “needs to be acknowledged and addressed by those who deal with L2 writers if these writers are to be treated fairly, taught effectively, and thus, given an equal chance to succeed in their writing-related personal and academic endeavors.”

# Thank You!

College Board researchers are encouraged to freely express their professional judgment. Therefore, the points of view or opinions stated in this presentation do not necessarily represent official College Board position or policy.

Please forward any questions, comments, and suggestions to Jennifer Kobrin at [jkobrin@collegeboard.org](mailto:jkobrin@collegeboard.org).